CHAPTER I

1.1 PRESENTATION

The Aimpoint CEU™ (Concealed Engagement Unit) is a rugged, patented optical accessory, developed for military and law enforcement use in conjunction with an Aimpoint® red dot sight.

The primary application for this product is for firing from behind obstacles and shelter, without giving away your position.

The CEU should be used with either the CEU High or Low Rise Ring to give the optimal height for the line of sight (optical axis) of your weapon. Whether you use an Aimpoint sight with or without a spacer, the CEU can be matched to fit the height of your red dot sight. The CEU ring can be mounted to any MIL-STD 1913 (Picatinny) weapon rail using the Aimpoint TwistMount™ base.

1.2 SPECIFICATION AIMPOINT CEU

Optical System

Operating Principle:	Two mirrors, reflective device, for true target view
Optical Magnification:	1X, unlimited eye relief
Clear Aperture:	25 mm diameter “see through”
Optical Coating:	Anti reflex coated protection elements and high reflection coated mirrors for maximum transmission, NVD compatible
Optical Signature:	The unit does not influence forward optical signature

Physical Specifications

Dimensions

Length:	90 mm (3.5”)
Width:	115 mm (4.5”)
Height:	40 mm (1.6”) CEU only, detached from the CEU Rise Ring and TwistMount base
Height of optical axis:	30 mm (1.2”) or 40mm (1.6”) alternatively over top surface of the Picatinny Rail
Rotation around optical axis:	±130°, measured from CEU pointing vertically upwards, as reference
Mass:	130 grams (4.6 oz), CEU only, separated from the TwistMount. Low Top ring 35 grams (1.2 oz) High Top ring 55 grams (1.9 oz) TwistMount base part 60 grams (2.1 oz)
Material Housing:	High strength glass reinforced polymer, grey, non-glare finish
Material Cover:	Rubber, black, non-glare finish
Material Ring:	Extruded, high strength aluminum, anodized
Material TwistMount:	Extruded, high strength aluminum, anodized
Radioactive Materials:	None (Tritium 0%, Thorium 0%, Thorium Fluoride 0%)
Hazardous Materials:	None (Mercury 0%)

Environmental Specifications

Temperature Range, Storage:	-45°C to +71°C (-50°F to +160°F)
Temperature Range, Operation:	-45°C to +55°C (-50°F to +131°F) instantaneous.
Humidity:	95% at 20°C (68°F) to 50°C (122°F), cycling
Immersion:	25 m (80 ft.)
Shock:	3 x 500 G 0.7-1.1 ms
Vibration:	XYZ: 10-30 Hz: 3 mm, 30-150 Hz: 5.75 G for 30 minutes
Chemical Resistance:	Materials not affected by cleaning chemicals, lubricants, oil or insect repellants.

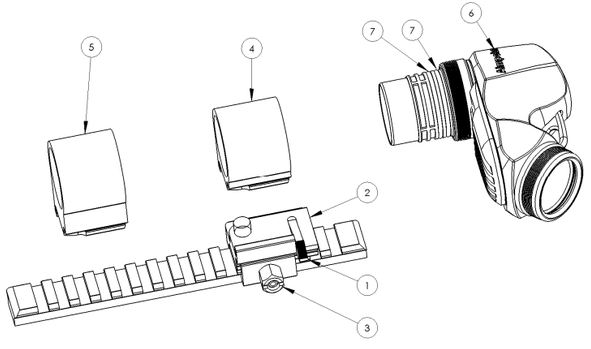
Mechanical Interface

Mount:	Mount on MIL-STD 1913 Rail System “Picatinny Rail”, using the Aimpoint TwistMount
Maintainability	Two o-rings (7) shall be kept lubricated to enable easy attachment/detachment of the CEU from the mounting Ring (Fig.3) and easy rotation of the CEU within the ring (Fig.1).

1.3 LOCATION OF COMPONENTS

See figure below

1) Locking bar
2) TwistMount base
3) Nut
4) CEU Low Rise Ring
5) CEU High Rise Ring
6) CEU
7) O-ring (2 pcs)



CHAPTER II

OPERATION UNDER NORMAL CONDITIONS

2.1 INSTALLING THE CEU ON A WEAPON

WARNING: Insure the Weapons should be unloaded and made the safety selector is in the ”safe” position before attempting to install, remove or perform maintenance on the CEU attachment or mounts.

2.1.1 The CEU attachment is designed for installation on most types of weapons which have a MIL-Std 1913 (Picatinny) Rail.

2.1.2 Installing the Aimpoint CEU on the weapon

Mount the CEU on the rail behind your Aimpoint Sight using the Bolt Nut (3). Note: Leave enough space between the CEU and the sight to provide clearance when mounting and dismounting the CEU on the TwistMount Base (2).

Verify that the TwistMount Base (2) is correctly positioned and that the recoil stop fits into a groove on the Picatinny Rail.

The Bolt Nut (3) shall be firmly tightened but do not over tighten (finger tighten the nut, then tighten an additional ¼ - ½ turn using a wrench). If an Aimpoint Sight is used with a spacer, the CEU High Rise Ring (5) shall be used.

The Aimpoint Sight and the CEU should be on the same optical axis.

2.2 OPERATING PROCEDURES

Once the CEU is mounted on the weapon, the CEU can rotate around its axis and is therefore suitable for both right-handed and left-handed corners, as well for aiming over and under obstacles, vehicles or walls (see figure 1).
To remove the CEU attachment from the weapon, press down on the Locking Bar (1) twist the CEU counter-clockwise, and then lift the unit off of the mount post (see figure 2). If the situation requires immediate removal of the CEU, take a firm grip around the body of the CEU and pull it straight backwards out of the mounting ring. (see figure 3).

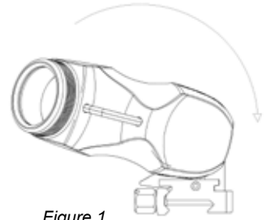


Figure 1

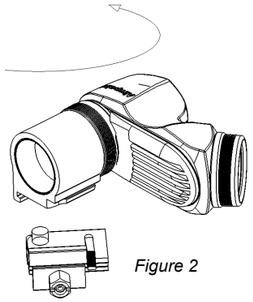


Figure 2

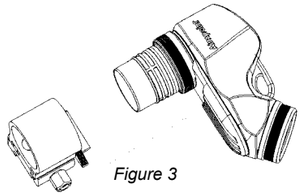


Figure 3

CHAPTER III

MAINTENANCE

3.0 CLEANING
The lenses shall never be cleaned with fingers but with lens paper/cloth.
If no lens paper/cloth available:

- To clear away debris (sand, grass etc): blow away the dirt.
- To clean lenses: mist up the lenses and dry them with a clean and soft piece of cloth.
- To lubricate the o-rings use a small amount of silicone based grease.

Aimpoint®

Operator and Maintenance Manual
for

Aimpoint CEU™

Concealed Engagement Unit

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